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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/043,487

DATE: 05/13/2002 Pile
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Input Set : N:\jumbos\10043487.RAW.txt
Output Set: N:\CRF3\05102002\J043487.raw

3 <110> APPLICANT: HYBRIGENICS
4 Pierre, LEGRAIN
6 <120> TITLE OF INVENTION: Protein-protein interactions between Shigella Flexneri
polypeptides and
7 mammalian polypeptides
9 <130> FILE REFERENCE: B4778A
11 <140> CURRENT APPLICATION NUMBER: US 10/043,487
C--> 12 <141> CURRENT FILING DATE: 2002-04-30
14 <150> PRIOR APPLICATION NUMBER: US 60/261,130
15 <151> PRIOR FILING DATE: 2001-01-12
17 <160> NUMBER OF SEQ ID NOS: 561
19 <170> SOFTWARE: PatentIn version 3.1
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22 <211> LENGTH: 888
23 <212> TYPE: DNA
24 <213> ORGANISM: Shigella Flexneri
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31 aaagcagcat tggttttttt aggagagaaaa ggtttttgtg atagcaatga tggcttatct 180
33 attatggac aacaaatacc aagagtattt aagaacaaga tggatatga ttatgtttt 240
35 aaaaatgaaa aaagtaaaaa tgatttctaa aaaaatggctg aatcatggct accacagagt 300
37 gaaccaatag taataaataa tgatgtgac gcattgaatg ctgctgctt ttttctgta 360
39 aaaaaagcga aaataaaaaac agtaaacgt actgattta aagagtataa taaggtttat 420
41 attcttggc acggtagtcc tggctctcat caattaggcc ttgggtcgga acttattgat 480
43 gtacaaaacaa tcatttcaag aatgaaagac tggatgttcc taaatgtgaa agatatccgt 540
45 ttacttcat gcggctccgc tgataaaatgt gctccaaaaa attttaacaa tgcccctgct 600
47 gaaagtcttt ctgtatctt taactctctg cttttttta aggaaaaaga atcttgctt 660
49 gagcagataa aaaaacaccc tggaaacgt gactcattga gtgatggct aaaaatatcc 720
51 ggctatcatg gatatggagt tcaactatgtt caagagctt ttccctactc acattatcg 780
53 tcaacttcaa ttccgttgc tccggagcat acagaaaaa gaagctctca gaaaaagact 840
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68 accgctatata cccacccat caatgaagaa aaatcagggg ggggatatacg tgggtttct 180
70 ttcaaaaaat tggccaaaat acagaacata tccattccga caaaaaataa taaggatgt 240
72 aaccggccata attgttttc attgatttg catggaaatg cccatgcgc gcgttaataac 300
74 agtgaatcgc tggggcgc cggaaatacc aaagaggaaa aactagaagt tcttcagca 360
76 cggaaataatg ctggggaaatc tgcttgcata atagctttc aagaaggatca ttccgtcgc 420

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 82 aatatcgagg ctatgatggc atatataaat atatgccatc atagtggat aaaacttaca 600
 84 gaaatagcag acagacttaa caataatgaa caagacatgt ttaatattat ttctgacaaa 660
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 99 atgccagatg aaaaaaattt aaaagatagt gcaaatatta ttaagattt cttaggaaa 180
 101 actatagcag cacagagtt tagtagaatg ttctctcaag gctctaactt taaatctta 240
 103 aatatagcaa ttgatgcacc atcagacgct aaaggctcat ttaaggctat tgacacatt 300
 105 gacagattat cgaaggcatta tatatctgaa ataagggaaa aacttcatcc tcttctgca 360
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 115 catcacactg ttgattttgg tgcaaattgcg tatatcattt atcatgactc tccatatgga 660
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 119 caatcatttt tagataaatt ttcagaggtt aataaagaag ttagtcgata cgtacatgga 780
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 123 ttatacctga ttgactttat tagaaaaagt gaagacccaa gcttcaagga gttttctat 900
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 139 tgtatgttgg ataacgcataa aaaatatgag aatgcagaaaa tgataaaactt attattgaaa 1380
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 154 gtaagttccc ttactatgtt caacgacacc cttcataata tcagaacaac aaatcaggca 180
 156 ttaaagaaag agcttcaca aaaaacgttg actaaaacat cgctagaaga aatagcatta 240
 158 cattcatctc agattagcat ggatgttaat aaatccgctc aactatttgg tattttcc 300
 160 aggaacgaat atccaattaa taaagacgca agagaattat tacattcagc cccgaaagaa 360
 162 gccgagctt atggagatca aatgatatct catagagaac tggatggctaa aattgcaaac 420
 164 tccatcaatg atattaatga acagttatctg aaagttatgt aacatgccgt tagttcatat 480
 166 actcaaatgtt atcaagattt tagcgctttt cttccagtc ttggccggctg gatctctccc 540
 168 ggaggttaacg acggaaactc cgtgaaattt caagtcaact cgctaaaaa ggcattggaa 600

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174	aacggggat	atgttgcag	tataaacatg	accccaatag	acaatatgtt	aaaaagctta	780
176	gataatctag	gtggaaatgg	cgaggttgc	ctagataatg	caaataatca	ggcatggaat	840
178	gccggattct	ctgccaaga	tgaaacaatg	aaaaataatc	ttcaaaactt	agttcaaaaa	900
180	tacagtaatg	ccaatagtat	ttttgataat	tttagaaagg	ttttgagtag	tacaataaagc	960
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195	caaagtctt	ccgaaacaca	aaaatcacaa	aattatcagc	agattgcagc	gcatattcca	180
197	cttaatgtcg	gtaaaaatcc	cgtattaaca	accacattaa	atgatgatca	acttttaaag	240
199	ttatcagagc	aggttcagca	tgattcagaa	atcattgctc	gccttactga	caaaaagatg	300
201	aaagatctt	cagagatgag	tcacacccctt	actccagaga	acactctgga	tatttccagt	360
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205	actgcagaaa	ctaaattggg	ctctcaattt	tcattgattt	cgttcgatgc	tacaaaatca	480
207	gctgcagaga	acattgttcg	gcaaggccctg	gcagccctat	catcaagcat	tactggagca	540
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213	ggttctaaat	tagggttaaa	taaacaataa	gatacaaata	tcacctcacc	acaaactaac	720
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221	acaatggaaa	catcagccgt	tgctggtaat	atattccacat	caggaggcg	ttatgcatct	960
223	gctcttgaag	aagaagaaca	actaatcagt	caggccagca	gtaaacaagc	agaggaagca	1020
225	tcccaagtat	ctaaagaagc	atcccaagcg	acaatcaat	taatacaaaa	attattgaat	1080
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242	gaagagcgtg	atgaggctgt	ctcccgactt	aaagaatgtc	ttatcaataa	ttccgatgaa	180
244	ttcgcactgg	accgtttaaa	tctgtcctcg	ctacctgaca	acttaccagc	tcagataacg	240
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256	cccggtgtca	gagagtattt	ttttgataga	aatcagataa	gtcatatccc	ggaaagcatt	600
258	cttaatctga	ggaatgaatg	ttcaatacat	attagtgata	acccattatc	atcccattgt	660
260	ctgcaagccc	tgcaaagatt	aaccttctcg	ccggactacc	acggccacg	gatttacttc	720

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268	aata	ac	ctcc	cg	gat	tc	g	ac	gg	tc	g	c	tt	gg	ct	tg	960	
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289	ggc	atg	aa	at	cc	tt	tat	ac	at	gt	at	cc	ct	cc	ca	at	gct	300
291	gt	gc	ctt	gg	cc	ct	tat	tt	at	gt	at	cc	ct	gt	aa	ta	ta	360
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295	ac	agg	taa	tt	at	tt	aa	tt	aa	tt	tt	tt	tt	tt	tt	tt	tt	480
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316					20				25					30				
319	Lys	Asn	Ser	Ser	Cys	Thr	His	Pro	Lys	Ala	Ala	Leu	Val	Phe	Leu	Gly		
320					35				40					45				
323	Glu	Lys	Gly	Phe	Cys	Asp	Ser	Asn	Asp	Val	Leu	Ser	Ile	Met	Gly	Gln		
324					50				55					60				
327	Gln	Ile	Pro	Arg	Val	Phe	Lys	Asn	Lys	Met	Leu	Tyr	Asp	Tyr	Val	Phe		
328		65				70				75					80			
331	Lys	Asn	Glu	Lys	Ser	Lys	Asn	Asp	Phe	Leu	Lys	Met	Ala	Glu	Ser	Trp		
332					85				90					95				
335	Leu	Pro	Gln	Ser	Glu	Pro	Ile	Val	Ile	Asn	Asn	Asp	Asp	Asp	Ala	Leu		
336					100				105					110				
339	Asn	Ala	Ala	Ala	Tyr	Phe	Ser	Val	Lys	Lys	Ala	Lys	Ile	Lys	Thr	Val		
340					115				120					125				
343	Asn	Asp	Thr	Asp	Phe	Lys	Glu	Tyr	Asn	Lys	Val	Tyr	Ile	Leu	Gly	His		
344					130				135					140				
347	Gly	Ser	Pro	Gly	Ser	His	Gln	Leu	Gly	Leu	Gly	Ser	Glu	Leu	Ile	Asp		
348		145				150				155					160			
351	Val	Gln	Thr	Ile	Ile	Ser	Arg	Met	Lys	Asp	Cys	Gly	Ile	Leu	Asn	Val		
352						165				170					175			

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 359 Lys Asn Phe Asn Asn Ala Pro Ala Glu Ser Leu Ser Cys Ile Leu Asn
 360 195 200 205
 363 Ser Leu Pro Phe Phe Lys Glu Lys Glu Ser Leu Leu Glu Gln Ile Lys
 364 210 215 220
 367 Lys His Leu Glu Asn Asp Glu Ser Leu Ser Asp Gly Leu Lys Ile Ser
 368 225 230 235 240
 371 Gly Tyr His Gly Tyr Gly Val His Tyr Gly Gln Glu Leu Phe Pro Tyr
 372 245 250 255
 375 Ser His Tyr Arg Ser Thr Ser Ile Pro Ala Asp Pro Glu His Thr Val
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 380 275 280 285
 383 <210> SEQ ID NO: 9
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 395 20 25 30
 398 Asn Asn Ile Ile Asn Val Thr Asn Thr Ala Ile Ser His Ala Ile Asn
 399 35 40 45
 402 Glu Glu Lys Ser Gly Gly Tyr Ser Gly Val Ser Phe Arg Lys Leu
 403 50 55 60
 406 Ala Lys Ile Gln Asn Ile Ser Ile Pro Thr Lys Asn Asn Lys Glu Tyr
 407 65 70 75 80
 410 Asn Arg His Asn Leu Phe Ser Leu Ile Trp His Gly Asn Ala Asp Ala
 411 85 90 95
 414 Ala Arg Lys Tyr Ser Glu Ser Leu Leu Ala Ala Glu Ile Pro Lys Glu
 415 100 105 110
 418 Glu Lys Leu Glu Val Leu Ala Ala Arg Asn Asn Ala Gly Glu Ser Ala
 419 115 120 125
 422 Leu Phe Ile Ala Leu Gln Glu Gly His Ser Ala Ala Ile Gln Ala Tyr
 423 130 135 140
 426 Gly Asp Phe Ile Lys Thr Phe Asp Leu Ser Pro Lys Glu Thr Ile Lys
 427 145 150 155 160
 430 Leu Leu Asp Val Arg Asp Asn Glu Gly Leu Pro Gly Leu Phe Leu Ala
 431 165 170 175
 434 Ala Gly Lys Gly Asn Ile Glu Ala Met Met Ala Tyr Ile Asn Ile Cys
 435 180 185 190
 438 His His Ser Gly Ile Lys Leu Thr Glu Ile Ala Asp Arg Leu Asn Asn
 439 195 200 205
 442 Asn Glu Gln Asp Met Phe Asn Ile Ile Ser Asp Lys Ile Gln Glu Leu
 443 210 215 220
 446 Phe
 447 225

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:49; N Pos. 298
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Seq#:71; N Pos. 218,222,223,229,233,235,237,240,259,260,265,282,283
Seq#:72; N Pos. 10,13,16,17,27,51,79,106,107,161,186,201,213,221,223,228
Seq#:72; N Pos. 238,241,248,250,256,259,268,269,272,275,276,278,279,280,284
Seq#:72; N Pos. 285,287,288,289,296,297
Seq#:73; N Pos. 57,166,169,188,199,216,218,223,225,226,233,236,242,243,248
Seq#:73; N Pos. 250,252,256,270,276,279,289,290,292,297,299,301,304,309
Seq#:74; N Pos. 276
Seq#:75; N Pos. 61,66,70,72,75,77,80,83,86,87,88,91,97,99,101,103,104,105
Seq#:75; N Pos. 107,109,112,119,120,121,131,132,137,145,147,151,152,153,155
Seq#:75; N Pos. 156,157,164,173,174,183,186,190,195,200,204,222,224,237,243
Seq#:75; N Pos. 247,248,251,260,269,276,277
Seq#:77; N Pos. 270

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Seq#:83; N Pos. 267,284
Seq#:88; N Pos. 26,28,29,30,31,35,41,44,45,46,47,49,51,52,58,59,63,64,68,72
Seq#:88; N Pos. 84,88,108,112,118,119,121,129,135,138,142,151,154,155,159
Seq#:88; N Pos. 170,181,183,186,187,208,215,220,222,229,232,236,242,249,259
Seq#:88; N Pos. 262,263,268,272,281,284,286
Seq#:90; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:90; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
Seq#:90; N Pos. 44,259,281,287
Seq#:93; N Pos. 294
Seq#:94; N Pos. 43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62
Seq#:94; N Pos. 63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82
Seq#:94; N Pos. 83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101
Seq#:94; N Pos. 102,103,104,105,106,107,108,109,110,111,112,113,114,115,116
Seq#:94; N Pos. 117,118,119,120,121,122,123,124,125,126,127,128,129,130,131
Seq#:94; N Pos. 132,133,134,135,136,137,138,139,140,141,142,143,144,145,146
Seq#:94; N Pos. 205,206,207,208,217,218,221,222,225,228,230,235,238,239,243
Seq#:94; N Pos. 245,248,252,254,255,259,261,264,268,269,273,277,279,282,288
Seq#:94; N Pos. 293,297
Seq#:102; N Pos. 3,6,18,20,23,32,53,75,89,93,95,103,109,127,177,189,194,201
Seq#:102; N Pos. 207,221,224,234,235,244,245,247,259,262,263,264,265,269
Seq#:102; N Pos. 271,277
Seq#:103; N Pos. 7,14,23,45,46,55,65,74,88,89,90,91,97,102,103,104,105,125
Seq#:103; N Pos. 127,128,132,133,143,155,167,188,196,197,198,204,213,223
Seq#:103; N Pos. 264,278,298,304,316,319
Seq#:109; N Pos. 1,2,11,22,36,37,38,45,47,48,53,58,70,73,89,96,100,101,102
Seq#:109; N Pos. 103,107,111,114,119,127,130,131,135,138,145,147,148,149
Seq#:109; N Pos. 164,165,166,169,177,187,190,194,208,212,215,223,230,233
Seq#:109; N Pos. 234,243,261,263,288,290,291,294,296
Seq#:115; N Pos. 3,8,10,11,40,46,62,65,80,96,99,114,115,125,146,147,150,169
Seq#:115; N Pos. 179,184,185,188,191,198,199,208,215,221,224,238,244,256
Seq#:115; N Pos. 258,264,289,297
Seq#:153; N Pos. 2,6,12,16,20,38,82,88,98,103,105,141,142,143,144,146,149
Seq#:153; N Pos. 151,155,160,163,170,184,190,193,199,208,213,219,221,225
Seq#:153; N Pos. 226,230,233,237,240,245,250,256,268,270,271,272,280
Seq#:155; N Pos. 87
Seq#:162; N Pos. 261
Seq#:170; N Pos. 193,203,209,219,222,224,244,247,259,261,268,269
Seq#:176; N Pos. 251,268,270
Seq#:202; N Pos. 116,204,235,268,269,277,283
Seq#:203; N Pos. 1,5,12,14,16,216,219,242,262,269,275,288,291,293,295
Seq#:205; N Pos. 12,19,20,22,38,39,44,67,75,76,80,88,100,108,115,117,128
Seq#:205; N Pos. 129,130,131,132,135,143,168,170,212,223,224,237,238,239
Seq#:205; N Pos. 250,251,254,257,259,267,275,276,279,283,284,288,290,299
Seq#:205; N Pos. 300
Seq#:210; N Pos. 242,272,279,283
Seq#:212; N Pos. 285
Seq#:214; N Pos. 1,5,7,22,32,33,34,35,51,55,60,61,69,71,72,79,81,87,92,94
Seq#:214; N Pos. 97,98,99,106,107,108,111,126,127,128,140,152,160,169,172
Seq#:214; N Pos. 188,200,208,214,220,222,223,224,228,231,235,244,254,271

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Seq#:214; N Pos. 272,280,281,285
Seq#:218; Xaa Pos. 1,2,4,5,10,14,18,20,29,33,37,38,39,43,44,47,48,50,54,60
Seq#:218; Xaa Pos. 61,65,68,69,73,75,78
Seq#:235; Xaa Pos. 34
Seq#:257; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:257; Xaa Pos. 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41
Seq#:257; Xaa Pos. 42,43,44,61
Seq#:262; Xaa Pos. 1,3,4,6,8,9,10,14,19,21
Seq#:273; Xaa Pos. 4,5,6
Seq#:274; Xaa Pos. 19
Seq#:276; Xaa Pos. 21,22,24,25,26,27,28,29,30,31,33,34,35,36,37,38,40,41,44
Seq#:276; Xaa Pos. 46,49
Seq#:289; Xaa Pos. 9,10,11,12,14,15,16,17,18,20,21,22,23,24
Seq#:291; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
Seq#:295; Xaa Pos. 15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33
Seq#:295; Xaa Pos. 34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49
Seq#:303; Xaa Pos. 2,6,7,8,11,18
Seq#:304; Xaa Pos. 3,5,8,15,16,19,22,25,30,31,33,34,35,42,43,45,48,52,56,63
Seq#:304; Xaa Pos. 66,71,75,88,93,100,102,106
Seq#:310; Xaa Pos. 1,4,8,13,16,18,20,24,25,30,34,35,36,38,40,43,44,45,49,50
Seq#:316; Xaa Pos. 1,3,4,14,16
Seq#:354; Xaa Pos. 1,2,6,7,13,28,30,33,35
Seq#:356; Xaa Pos. 29
Seq#:371; Xaa Pos. 65
Seq#:404; Xaa Pos. 1,2,4,5,6
Seq#:406; Xaa Pos. 4,7,8,13,15
Seq#:415; Xaa Pos. 1,2,3,8,11,12,17,19,20,21,24,27,29,31,32,33,36,43,47
Seq#:430; Xaa Pos. 2,3,4,7,8
Seq#:431; Xaa Pos. 10,12,14,16
Seq#:433; Xaa Pos. 12,23
Seq#:434; Xaa Pos. 19
Seq#:438; Xaa Pos. 5,10,13,14,15,16,17,18,19,23,25,26,27,28,30,31,33,34,35
Seq#:438; Xaa Pos. 38,39,40,42,43,44,45,48,52,53,55,56,57,60,61
Seq#:444; Xaa Pos. 8,9,13
Seq#:445; Xaa Pos. 5,6,11,14,15,17,18,20,21,24,25,26,29,33
Seq#:446; Xaa Pos. 1,4,7
Seq#:447; Xaa Pos. 2,3,4,5,7
Seq#:449; Xaa Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26
Seq#:449; Xaa Pos. 27,28,29,30,31,32,33,34,35,36
Seq#:454; Xaa Pos. 12
Seq#:459; Xaa Pos. 1,2,3,7,12,14
Seq#:460; Xaa Pos. 1,2,4,6,11,16,22,25,28,29,31,34,41,43,45,49,50,51,53,54
Seq#:460; Xaa Pos. 55,56,63,65,70,71
Seq#:461; Xaa Pos. 1
Seq#:462; Xaa Pos. 5
Seq#:463; Xaa Pos. 3,21,29,41,42,43,47,48,50,51,53,54,57,58,59,60,61,62,63
Seq#:463; Xaa Pos. 64,66
Seq#:465; Xaa Pos. 22,23
Seq#:466; Xaa Pos. 4

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Seq#:467; Xaa Pos. 1,7
Seq#:468; Xaa Pos. 1,2,4,5,7,9,10,12,16,19,23,24,25,26,27,28
Seq#:470; Xaa Pos. 29
Seq#:471; Xaa Pos. 1,2,3,5,8,11,12,14,15,17,18
Seq#:472; Xaa Pos. 2,3,7,11,12,15,18,20,21
Seq#:475; Xaa Pos. 2
Seq#:486; Xaa Pos. 4
Seq#:487; Xaa Pos. 1
Seq#:488; Xaa Pos. 1,7,9,11,12,17,19,22,23,24,28,32,34
Seq#:489; Xaa Pos. 5
Seq#:490; Xaa Pos. 1,3,6,7,8,10,12
Seq#:491; Xaa Pos. 1,2,4,5,8,9
Seq#:496; Xaa Pos. 30,37,39
Seq#:502; Xaa Pos. 6,7,10,11,12,13,14,16,17,19,20,22,24,27,30,33,35,36
Seq#:515; Xaa Pos. 2,7,9,12,14
Seq#:516; Xaa Pos. 1,17,23,32,33,36,37,40,41,45,46,47,48,49
Seq#:517; Xaa Pos. 1,2,3,9,10,11,16,17,18
Seq#:518; Xaa Pos. 2,4,5,8
Seq#:519; Xaa Pos. 4,5,13,14,16
Seq#:520; Xaa Pos. 2,3,8,19,20,23,30,38,41,43,44,45,48,51,53,55,56,61,63,67
Seq#:520; Xaa Pos. 69,78
Seq#:533; Xaa Pos. 9,10,11,12,13,15,16,18,23,25,26
Seq#:534; Xaa Pos. 1,4,7,8,10,11,12,14,16,18,20,24,25
Seq#:540; Xaa Pos. 47
Seq#:541; Xaa Pos. 1,3,8,15,16,20,23
Seq#:547; Xaa Pos. 5,11
Seq#:548; Xaa Pos. 18
Seq#:551; Xaa Pos. 15,26,29,31
Seq#:556; Xaa Pos. 9,10,18,25,27,29,34,35,36
Seq#:561; Xaa Pos. 4,6,7,8,11,15,17,20,24,25,26,29,37,38,52,56,60,61,65,66
Seq#:561; Xaa Pos. 67,68,70,73,76,78,81

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Input Set : N:\jumbos\10043487.RAW.txt
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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:1235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:60
L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:120
L:1239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:180
L:1241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:240
L:1636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:180
L:1638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:240
L:1802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:60
L:1808 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:240
L:1810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:300
L:2257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:240
L:2456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:2458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:60
L:2460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:120
L:2462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:180
L:2464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:240
L:2723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:120
L:2725 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:180
L:2727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:240
L:2729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:300
L:2874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:240
L:3093 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:3095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:60
L:3097 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:120
L:3099 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:180
L:3101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:240
L:3432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:120
L:3434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:180
L:3436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:240
L:3459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:240
L:3791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0
L:3793 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:60
L:3795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:120
L:3797 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:180
L:3799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:240
L:3970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
L:3972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:60
L:3974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:120
L:3976 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:180
L:3978 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:240
L:4143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0
L:4147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:120
L:4149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:180
L:4151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:240
L:4153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:300
L:4176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:240
L:4433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:60

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L:4435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:120
L:4437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:180
L:4439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:240